



UNITED STATES PATENT AND TRADEMARK OFFICE

Handwritten initials

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/730,478	12/06/2000	John Mundy	030307-0193	7057
22428	7590	09/24/2004	EXAMINER	
FOLEY AND LARDNER SUITE 500 3000 K STREET NW WASHINGTON, DC 20007			IBRAHIM, MEDINA AHMED	
			ART UNIT	PAPER NUMBER
			1638	

DATE MAILED: 09/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/730,478

Applicant(s)

MUNDY ET AL.

Examiner

Medina A Ibrahim

Art Unit

1638

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 December 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-47 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-47 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Supplemental Restriction/Election

The restriction requirement of 09/07/04 has been modified. Claims 1-47 are pending and are subject to the following restriction. Claims 17 and 19 are improper multiple dependent claims as they depend from any of claims 2 to 16. In the instant restriction, claims 17 and 19 are considered to depend from claim 16 and grouped with Group III. However, the appropriate grouping will depend on the correction of the claims. Also, claims 24-29 are improper multiple dependent claims as they depend from any of claims 1 to 24. In the instant restriction, claims 24-29 are considered to depend upon claim 1 and grouped with Group I. However, the appropriate grouping will depend on the correction of the claims.

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-4, 24-31, 34-35, 36-37, 41, 44 and 47 are drawn to a method of expressing antisense MAPK4 gene in a transgenic plant and a transgenic plant comprising said antisense MAPK gene, classified in class 800, subclass 286, for example.
- II. Claims 5-13 and 40, drawn to a method of expressing two genes MAP kinase genes in a transgenic plant, classified in class 435, subclass 69.7, for example.
- III. Claims 14-23, 32-35, 42-43, and 45-47, drawn to a method of expressing a catalytically inactive or mutated MAPK4 gene in a transgenic plant and a

Art Unit: 1638

transgenic plant comprising said inactive/mutated MAPK gene, classified in class 800, subclass 278, for example.

- IV. Claims 38-39, drawn to a method for screening a plant, classified in class 435, subclass 6, for example.

The inventions are distinct, each from the other because of the following reasons:

Inventions I-IV are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions use different starting material and comprise distinct steps that demonstrates that each method has a different mode of operation. The resultant products are also different. In addition, the instant specification does not disclose that these methods are usable together.

The method of Group I requires antisense expression of a MAPK4 gene, and a transgenic plant comprising said antisense MAPK4 gene, which are not required by any of the other groups. The method of Group II requires two MAPK genes (two MAPK4 genes or fused MAPKK and MAPK4 genes) and expression of an activated MAPKK/MAPK4 fusion protein in a transgenic plant, which are not required by any of the other groups. The method of Group III requires a catalytically inactive/mutated MAPK4 gene and appropriate promoters, and a transgenic plant comprising said inactive/mutated MAPK4 gene, which are not required by any of the other groups. The method of Group IV requires screening and selection of a plant from a plant population,

Art Unit: 1638

and use of insertion element specific primers, which are not required by any of the other groups. Therefore, each method is divergent in materials and steps.

Furthermore, the distinct steps and products require separate and distinct search. The inventions of Groups I-IV have a separate status in the art as shown by their different classifications. As such, it would be burdensome to search any two of the inventions of Groups I-IV together.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Art Unit: 1638

Contact Information

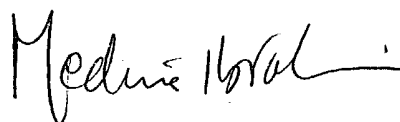
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Medina A. Ibrahim whose telephone number is (571) 272-0797. The Examiner can normally be reached Monday -Thursday from 8:00AM to 5:30PM and every other Friday from 9:00AM to 5:00 PM. Before and after final responses should be directed to fax nos. (703) 872-9306 and (703) 872-9307, respectively.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Dr. Amy Nelson, can be reached at (571) 272-0804.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

9/7/04

Mai



MEDINA A. IBRAHIM
PATENT EXAMINER